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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/016,906 | 12/14/2001 | Andrew I. Hickson | GB920010074US1 | 9630 |

7590 06/10/2005

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| EXAMINER |
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WALSH, JOHN B

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| ART UNIT | PAPER NUMBER |
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2151

DATE MAILED: 06/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/016,906

Applicant(s)

HICKSON ET AL.

Examiner

John B. Walsh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 23 is/are allowed.
- 6) ☒ Claim(s) 1, 17, 22 and 24 is/are rejected.
- 7) ☒ Claim(s) 2-16 and 18-21 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/4/02.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: Page 1- the copending application information is missing. Appropriate correction is required.
2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Currently the abstract is longer than 150 words.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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4. Claims 1, 17, 22 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,101,545 to Balcerowski et al.

As concerns claim 1, a method of communication in a publish/subscribe environment in which publisher programs send messages to subscriber programs via one or more message brokering systems, the method comprising the following steps: responsive to receipt of a , published message at a message broker, referring to characteristics of the received message and subscriber-specified quality of service requirements to determine an appropriate quality or service for onward transmission of the message (column 2, lines 43-48); selecting a communication protocol in accordance with the determined quality of service (column 2, lines 51-52); and transmitting the message using the selected communication protocol (90).

As concerns claim 17, a method according to claim 1, wherein the message broker determines an appropriate quality of service by determining which subset of subscribers are currently connected to the message brokering system and referring to the subscriber-specified quality of service requirements for only the currently connected subset of subscribers (if a message is sent the subscriber is connected and the QOS is referred for the message).

As concerns claim 22, a message brokering system, configured to provide a publish/subscribe service for publisher and subscriber programs, comprising: means, responsive to receipt of a published message at the message brokering system, for determining an appropriate quality of service for onward transmission of the message in accordance with subscriber-specified quality of service requirements for the received message (column 2, lines 43-48); means for selecting a communication protocol in accordance with the determined quality of service (column 2, lines 51-52); and means for transmitting the message using the selected communication protocol (90).

As concerns claim 24, a computer program product for providing a publish/subscribe service for publisher and subscriber programs, comprising program code recorded on a machine-readable recording medium, the program code comprising: means, responsive to receipt of a message from a publisher program, for determining an approximate quality of service for onward transmission of the message in accordance with subscriber-specified quality of service requirements for the received message (column 2, lines 43-48); means for selecting a communication protocol in accordance with the determined quality of service (column 2, lines 51-52); and means for transmitting the message using the selected communication protocol (90).

5. Claims 1, 17, 22 and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,463,470 to Mohaban et al.

As concerns claim 1, a method of communication in a publish/subscribe environment in which publisher programs send messages to subscriber programs via one or more message brokering systems, the method comprising the following steps: responsive to receipt of a published message at a message broker, referring to characteristics of the received message and subscriber-specified quality of service requirements to determine an appropriate quality or service for onward transmission of the message (column 5, lines 48-52; message from network entity is part of the data flow); selecting a communication protocol in accordance with the determined quality of service (column 5, lines 60-66); and transmitting the message using the selected communication protocol (column 6, lines 1-2; message is executed after being processed).

As concerns claim 17, a method according to claim 1, wherein the message broker determines an appropriate quality of service by determining which subset of subscribers are

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currently connected to the message brokering system and referring to the subscriber-specified quality of service requirements for only the currently connected subset of subscribers (if a message is sent the subscriber is connected and the QOS is referred for the message).

As concerns claim 22, a message brokering system, configured to provide a publish/subscribe service for publisher and subscriber programs, comprising: means, responsive to receipt of a published message at the message brokering system, for determining an appropriate quality of service for onward transmission of the message in accordance with subscriber-specified quality of service requirements for the received message (column 5, lines 48-52, message from network entity is part of the data flow); means for selecting a communication protocol in accordance with the determined quality of service (column 5, lines 60-66); and means for transmitting the message using the selected communication protocol (column 6, lines 1-2, message is executed after being processed).

As concerns claim 24, a computer program product for providing a publish/subscribe service for publisher and subscriber programs, comprising program code recorded on a machine-readable recording medium, the program code comprising: means, responsive to receipt of a message from a publisher program, for determining an approximate quality of service for onward transmission of the message in accordance with subscriber-specified quality of service requirements for the received message (column 5, lines 48-52, message from network entity is part of the data flow); means for selecting a communication protocol in accordance with the determined quality of service (column 5, lines 60-66); and means for transmitting the message using the selected communication protocol (column 6, lines 1-2, message is executed after being processed).

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Allowable Subject Matter

6. Claims 2-16 and 18-21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

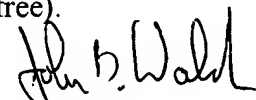
7. Claim 23 is allowed.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John B. Walsh whose telephone number is 571-272-7063. The examiner can normally be reached on Monday-Wednesday from 5:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on 571-272-3939. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


John B. Walsh
Primary Examiner
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